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09/804,735	03/13/2001	Kannan Srinivasan	696.002	2033
35195	7590	04/17/2006	EXAMINER	
FERENCE & ASSOCIATES 409 BROAD STREET PITTSBURGH, PA 15143			JANVIER, JEAN D	
			ART UNIT	PAPER NUMBER
			3622	

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/804,735

Applicant(s)

SRINIVASAN ET AL.

Examiner

Jean Janvier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Specification*

The title of the invention should be brief, descriptive and technically accurate. See 37 CFR 1.72.

### Status of the claims

Claims 1-20 are currently pending in the Instant Application, while claims 21 and 22 were canceled.

### Claim Objections

Claims 1 and 20 are objected to because of the following informalities-

Concerning claims 1 and 20, in the steps of “determining an optimal advertisement wherein the determination of the optimal advertisement **involves real-time learning from the dynamic analyses of the configuration data of step (b)**”, it is not clear what “dynamic analyses” the Applicant is referring to since step (b) only refers to “random sampling visitors to the web site according to the configuration data...”, which broadly interpreted means - -selecting a group of users or a cluster of users, having profile matching an advertiser’s criteria or configuration data, to receive one or more targeted advertisements from the advertiser or merchant during a training period or discrete interval....--

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***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-20 are rejected under 35 USC 102(e) as being anticipated by Robinson, US Patent 5, 918, 014.

As per claims 1-20, Robinson discloses a system based on the fact that people who have shown a tendency for similar likes and dislikes in the past will show a tendency for such similarities in the future. Those people, continues Robinson, who strongly display such similarities with respect to a particular person ("the subject") are referred to as that person's "community." If the members of a subject's community tend to click on a particular Web ad, then it is likely that the subject will also tend to click on that ad. Robinson further teaches a system that combines techniques for determining the subject's community (for determining which group the subject or user belongs to based on some criteria), and in the end determining which ads (determining an optimal ad that will generate a high click-through rate from users having similar profile as the community or sampled group whose interaction with a web site or the system has been recorded or logged and hence maximizing profits) to show to the user based on characteristics of the subject's community (sampled group or visitors). The information used to

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determine whether a given individual should be in the subject's community is gleaned from the individual's activities in the interactive medium. Means are provided to track and record a consumer's activities so all the information he generates can be tied together in a database, e.g. by means of "cookies;" or by software running on the consumer's computer, such as an in-line plug-in working in conjunction with the Web browser, or the Web browser itself. The individuals with the greatest calculated similarity become the subject's community (e.g. clusters are formed of groups of very similar consumers are formed). Ads are presented to the subject based on his community, optionally selected based on demographics associated with the community. In short, a plurality of targeted visitors' activities, including ads viewed, to a web site are monitored and based upon these visitors' reactions to one or more viewed ads, the one or more ads are then being recommended or displayed to one or more users (being in the same group or cluster as those sampled visitors) having similar profile (configuration data as specified by an advertiser or merchant), such as demographics, as these visitors (See abstract).

Moreover, in the interactive mode or medium on the Internet, the monitoring may comprise previously visited web sites by the targeted visitors, frequency of such visits, items purchased at online stores including their prices (purchase history), entertainment recommendation ratings provided by the visitors, ads read or clicked on by the visitors and the visitors' disinterest in an ad (**Col. 2: 32-48**).

Robinson further discloses, in one embodiment, that a new ad is displayed randomly or on a fixed schedule to a certain number of users or visitors (sampling visitors). During this "training period" for the new ad, **a certain percentage of the members of the subject's community will click on the new ad**. If this is an unusually high proportion (a percentage better

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or a threshold number), then there is a relatively high likelihood that the ad will be of relatively high interest to the subject or to one or more similar visitors (the ad will generate more click-throughs from one or more other visitors with similar profile). Here, statistical techniques (analyses) are used to determine a probability, associated with a fixed confidence level, with which one can assume that a randomly-chosen member of the subject's community (or one or more other users) will tend to click on the ad; this probability is used as the measure of similarity. Once again, a new ad is displayed to certain visitors of the community of surfers (sampling visitors) and the system determines whether a high or low proportion of visitors have indeed read the ad and have chosen to view further information associated with the ad (weighing process or click-through). If a high proportion has chosen to view further information related to this ad, then the ad will be presented to similar users having the same profile as the sampled visitors who had originally interacted with the ad (Col. 3: 3-28; col. 3: 61 to col. 4: 14; See claims 1-3, 8 and 17 of the current reference).

**(determining an optimal advertisement following an analysis or monitoring process, which shows that at least one advertisement has received an unusually high click-throughs by the sampled users or users in a subject community, at discrete time intervals or during a training period, who have met an advertiser's criteria (specification or requirements) or configuration data to receive a targeted advertisement and displaying the at least one advertisement or optimal advertisement to a second user or subject having similar profile as the sampled users or users within the community.**

**Thereafter, the optimal advertisement is displayed to at least a second user having a similar profile as the first plurality of users (sampled users or first group of users), meeting**

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**the advertiser's or merchant's configuration data or specifications, who have viewed the training advertisement (now optimal advertisement) during a training period (at discrete time intervals) and performed an unusually high proportion of click-throughs on the training advertisement during the training period as read from the monitoring data or determined by an analytical process).**

Additionally, it is understood that once a user's or subject's community or associated group is known, then targeted ads scheduled to be displayed to the user or subject are determined based on a correlation between the group's profile and the user's profile (according to the advertiser's or merchant's specifications or criteria or received configuration data). Subsequently, a web site, where the ads will be presented, related to these targeted ads is updated accordingly to reflect the generation of these targeted ads such that the ads can be displayed to the user or subject in a future visit at the web site (associated with at least one generated ad) contingent upon the advertiser's specifications.

**(random sampling visitors continuously during the training period of the advertisement or random sampling visitors at discrete time intervals over time to determine if the advertisement is an optimal advertisement to be displayed to a user having similar profile as the visitors if a great percentage of these visitors have indeed clicked on the advertisement during the training period).**

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See fig. 1; Col. 1: 27 to col. 3: 46; col. 7: 47 to col. 8: 20; see claims 1-25 of the present reference.

### **Response To Applicant's Arguments**

First, Robinson discloses in general, contrary to the Applicant's findings, a system for displaying a targeted (optimal) advertisement from an advertiser to at least one second user (subject) if a plurality of first users from the subject's community or if an unusually high proportion of members from the subject's community (high proportion of the first users), having similar profile as the subject or second user, have indeed clicked on the same advertisement. Here, the advertiser has provided one or more advertisements along with display criteria **(merchant's configuration data)**, such as demographics, that the users must have before the advertisements can be presented to them. The system is configured to at least display one targeted advertisement to a plurality of first users (randomly selected) matching the merchant's received configuration data or advertiser's display criteria. Subsequent to displaying a plurality of advertisements to a plurality of different groups of first users with different profiles matching the advertisements display criteria during a training period or test period or at discrete intervals (randomly sampling **continuously or at discrete intervals** visitors in accordance with the merchant's configuration data or display criteria), training or test data are collected and used to determine which advertisement(s) among the plurality of displayed advertisements receives an unusually high proportion of clicks from a plurality of first users (randomly sampled users). And the advertisement receiving the highest number of clicks from a first plurality of users having a specific profile is qualified as the **optimal advertisement** **(determining an optimal**



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advertisement following an analysis or monitoring process, which shows that at least one advertisement has received an unusually high click-throughs by the sampled users or users in a subject community, at discrete time intervals or during a training period, who have met an advertiser's criteria (specification or requirements) or configuration data to receive a targeted advertisement and displaying the at least one advertisement or optimal advertisement to a second user or subject having similar profile as the sampled users or users within the community).

Thereafter, the optimal advertisement is displayed to at least a second user having a similar profile as the first plurality of users (sampled users or first group of users), meeting the advertiser's or merchant's configuration data or specifications, who have viewed the training advertisement (now optimal advertisement) during a training period (at discrete time intervals) and performed an unusually high proportion of click-throughs on the training advertisement during the training period as read from the monitoring data or determined by an analytical process.

Robinson further discloses, in one embodiment, that a new ad is displayed randomly or on a fixed schedule to a certain number of users or visitors (randomly sampling visitors). During this "training period" for the new ad, **a certain percentage of the members of the subject's community (certain number of users) will click on the new ad** (random sampling visitors during the training period (at discrete time intervals) of the advertisement or random sampling visitors at discrete time intervals over time to determine if the advertisement is an optimal advertisement to be displayed to a user having similar profile as the sampled

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**visitors if a great percentage of these visitors have indeed clicked on the advertisement during the training period**). If this is an unusually high proportion (a percentage better or a threshold number), then there is a relatively high likelihood that the ad will be of relatively high interest to the subject or to one or more similar visitors (the ad will generate more click-throughs from one or more other visitors with similar profile). Here, statistical techniques (analyses) are used to determine a probability, associated with a fixed confidence level, with which one can assume that a randomly-chosen member of the subject's community (or one or more other users) will tend to click on the ad; this probability is used as the measure of similarity. Once again, a new ad is displayed to certain visitors of the community of surfers (sampling visitors) and the system determines whether a high or low proportion of visitors have indeed read the ad and have chosen to view further information associated with the ad (weighing process or click-through). If a high proportion has chosen to view further information related to this ad, then the ad will be presented to similar users having the same profile as the sampled visitors who had originally interacted with the ad (Col. 3: 3-28; col. 3: 61 to col. 4: 14; See claims 1-3, 8 and 17 of the current reference).

Further, broadly stated, “randomly sampling visitors to the Internet website according to the configuration data continuously or at discrete intervals” is interpreted as - -random sampling continuously or at discrete time intervals visitors to the website according to advertiser’s specifications or configuration data - -. Here, the prior art does silently or implicitly support the step of - -continuously or periodically (at discrete intervals) random sampling visitors to the web site to determine an optimal or successful advertisement--. In general, the random sampling of

visitors is either taken at all time or continuously or the random sampling is taken at specific period of time (at discrete time intervals).

Therefore, the Applicant's request for allowance or withdrawal of the last Office Action has been fully considered and respectfully denied in view of the foregoing response since the Applicant's arguments as herein presented are not plausible and thus, the current **Office Action has been made Final.**

### **Conclusion**

Although the following references were not used in the Office Action, they were highly considered by the Examiner. Applicants are further directed to consult these references.

US Patent 6,567,786 to Bibelnicks discloses a method, and system for increasing the efficiency of customer contact strategies is disclosed. Customers are analyzed based upon historical criteria; a promotional plan (a group of promotion events implemented or to be implemented over a particular time period) is analyzed to determine the effect of each promotion event on the other promotion events in the promotional plan; and, based on this analysis, the optimal promotion stream (a specific subset of the promotional plan to be sent to customers or a group of similar customers) is determined so as to maximize the ROI of the promotional plan as a whole (See abstract).

US Patent 6, 356,879 to Aggarwal discloses a system for deriving product characterizations for products offered at an e-commerce site based on the text descriptions of the products provided at the site. A customer characterization is generated for any customer

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browsing the e-commerce site. The characterizations include an aggregation of derived product characterizations associated with products bought and/or browsed by that customer. A peer group is formed by clustering customers having similar customer characterizations.

Recommendations are then made to a customer based on the processed characterization and peer group data (See abstract).

US Patent 6, 430, 539 to Lazarus discloses a predictive modeling of consumer financial behavior is provided by application of consumer transaction data to predictive models associated with merchant segments. Merchant segments are derived from consumer transaction data based on co-occurrences of merchants in sequences of transactions. Merchant vectors representing specific merchants are clustered to form merchant segments in a vector space as a function of the degree to which merchants co-occur more or less frequently than expected. Each merchant segment is trained using consumer transaction data in selected past time periods to predict spending in subsequent time periods for a consumer based on previous spending by the consumer. Consumer profiles describe summary statistics of consumer spending in and across merchant segments. Analysis of consumers associated with a segment identifies selected consumers according to predicted spending in the segment or other criteria, and the targeting of promotional offers specific to the segment and its merchants (See abstract).

US Patent 6, 338, 066 to Martin discloses a log of previous web-surfer behavior listing the order in which each surfer downloaded specific items at the web site, and given a meaningful classification of those same items, future surfer behavior is predicted by the present invention. The algorithm utilizes a quantitative model relating items downloaded prior to some specified

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event to items downloaded after that same event. When the model is applied to a new surfer's session prior to an analogous event, the present invention predicts the likely behavior of the surfer subsequent to that event. The predicted behavior is then further analyzed to derive a quantitative value for the utility of the expected behavior. By randomly selecting sample sessions from a web log, multiple models of surfer behavior can be generated. The multiple models can then be applied to a new surfer's session to produce a predicted behavior/utility distribution and thus a confidence interval for the predicted behavior/utility.

Furthermore, Martin discloses that one of the key problems facing merchants or advertisers on the World Wide Web (Web) is how to most effectively utilize the information provided by their web server logs to increase sales, and thereby increase profits. The Web provides the potential for one-to-one marketing of products to customers. However, successful marketing can only be accomplished if the unique characteristics of each Web customer (surfer) can be distinguished, and proper (optimal) advertisements, i.e., those that have a high probability of success, are placed in front of the proper surfers. If the proper advertisement is not placed in front of the most likely purchasing surfer, the likelihood of a purchase is dramatically reduced.

The present system presents a new method for predicting future surfer behavior based on what the surfer has done in the past and comparing this behavior to similar prior surfer behavior. This method may be used separate from, or in conjunction with, information gathered via other sources, e.g., cookies, demographic information, or through answers to direct questions. This method or process has been implemented in the present system and referred to as the SurfAid Predictor. One application for the SurfAid Predictor would be to select one optimal advertisement from a set of potential advertisements based on the advertisement's total predicted

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effect on buying behavior. Another application for the SurfAid Predictor is to select one optimal link from a set of potential links based on the predicted behavior of the surfer and the potential that the surfer will want to use the link presented.

See abstract; col. 1: 66 to col. 2: 18; col. 2: 43 to col. 3: 12.

WO 97/41673 to Gerace discloses a system for displaying advertisements to a user, over the Internet, based on the user's preferences (interests, habits or psychographic or behavioral profile or specification information) and demographic information. The user's psychographic profile and demographic profile are collected from the user during a registration or an enrollment or sign-up process. Thereafter, the psychographic profile is constantly refined using the user's monitored viewing habits and computer activity. Further, content of categories of interest and display format in each category are included in the psychographic profile as a result of the user's viewing or browsing activities (specification information identifying the type of information item the user is interested in). Consequently, targeted advertisements are appropriately displayed to the selected user via his computer screen, based on the user's psychographic and demographic profile, when he logs into the system to request a primary content and wherein these advertisements are constantly being modified in accordance with the user's interaction or viewing activities (viewing of agate information) or psychographic or behavioral profiles.

35; p. 33: 31 to p. 34: 9; p. 26: 7-20; p. 18: 22 to p. 19: 4; p. 30: 23 to p.31:8) (See abstract; figs. 3B-3F; p. 3: 2 to p. 5: 19; p. 13: 1-22; p. 39: 22 to p. 45: 7).

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication from the Examiner should be directed to Jean D. Janvier, whose telephone number is (571) 272-6719. The aforementioned can normally be reached Monday-Thursday from 10:00AM to 6:00 PM EST. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Eric W. Stamber, can be reached at (571) 272- 6724.

Non-Official- 571-273-6719.

Official Draft : 571-273-8300

Jean D. Janvier

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**JEAN D. JANVIER**  
**PRIMARY EXAMINER**

